

This example of a system analysis code that makes elements of the AP-1000 reactor mathematically discrete is one topic of MeV school lectures.

Experts, young researchers, students learn nuclear modeling, experimentation, validation

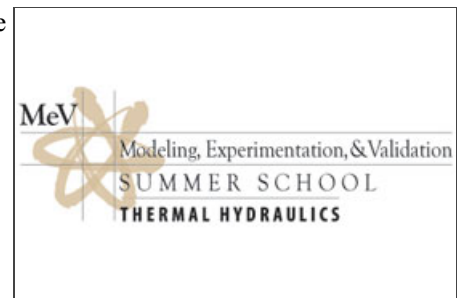
by [Jo Seely](#), *Nuclear Science and Technology communications intern*

Leaders in nuclear energy are gathering in Idaho Falls this month for the Modeling, Experimentation and Validation (MeV) School, bridging the gap between the current knowledge base and the next generation of nuclear engineers.

More than 50 students and researchers from national and international settings are registered for the July 21-30 session hosted by the Department of Energy's [Idaho National Laboratory \(INL\)](#), [Argonne National Laboratory \(ANL\)](#) and [Idaho State University \(ISU\)](#).

"INL, ANL and ISU are all very excited to be hosting this event," said Kim Mousseau, an INL Nuclear Science and Engineering manager and chief operating officer of the MeV School. "It is the first school to bring nuclear scientists together to discuss specific concepts, such as this year's emphasis on thermal hydraulics, reactor physics and safety analysis."

Nuclear experts in those three areas will serve as lecturers for the school. They come from universities and laboratories to ensure a wide range of teaching and mentoring expertise for the MeV students. An international board of senior experts directed the organization and conduct of the school, drawing topical expertise from around the globe.



For more information on the MeV School, visit www.MeVSchool.org.



Nam Truc Dinh, Ph.D., a Fellow at INL and one of the academic deans of the MeV School.

"The curriculum intends to bridge three areas, each having its own importance, of modeling, experimentation and validation," said Nam Truc Dinh, Ph.D., a Fellow at INL and one of the academic deans of the MeV School.

In today's world of nuclear energy, a great amount of knowledge exists, but is not found in classroom texts. Organizers hope that discussions will evolve from the basic theoretical foundation of nuclear information, allowing the MeV students to create a dialogue of modern knowledge among lecturers and panelists from industry, universities and national labs.

"The special thing is this school offers the opportunity for interactions between attendees, lecturers and mentors from national labs, such as a poster session, a panel with distinguished scientists and leaders, and roundtables in the evenings," said Dinh.

The MeV School hopes to create a dynamic setting where early career nuclear engineers gain information from those experienced in the field. Through this interaction, attendees will create connections between those in the field and other MeV students focusing in all three areas of modeling, experimentation and validation.

"This culture and synergy existed in the early days of nuclear power science and technology development, but has degraded over time as the knowledge base enlarged and specialization reigns both in training and professional jobs," said Dinh.

The coursework is designed to broaden the knowledge of the early career nuclear engineers while addressing the anticipated demands and challenges of nuclear energy in the future. The MeV School aims to develop a network of nuclear scientists capable of leading the cultural transformation to risk-informed design, operation and safety of advanced nuclear power plants.

"The drive here is to promote a culture in design and safety analysis that removes formal partitioning between the three areas, while promoting their synergy, so the students can later be more effective in their research and analysis work," said Dinh.

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